

19. The method according to claim 18 wherein the sheath is entirely stripped away at said last section.

20. The method according to claim 17 wherein during manufacture of said last section only at least a part of said sheath is provided thereon.

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21. The method according to claim 20 wherein during manufacture of said last section no sheath is provided thereon at all.

22. The method according to claim 17 including the step of providing said sheath such that a diameter thereof tapers in wedge-like fashion toward said light exit in a region of said last section.

23. The method according to claim 17 including the step of removing at least the portion of said sheath at said section by etching.

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24. A laser fiber system for a fiber laser, comprising:  
a laser fiber core as a laser resonator surrounded by a pump fiber comprising an inner fiber portion which in turn is surrounded by an outer sheath, said fiber core having a laser light exit at an end thereof; and

at a last section of the pump fiber leading to said light exit said sheath being at least partially removed to reduce pump light emitted with laser light at said laser-light exit.

25. The system according to claim 24 wherein the sheath at said last section is entirely removed.

26. The system according to claim 24 wherein at a region of said last section said sheath tapers in a wedge-like fashion toward said light exit.

27. The system according to claim 24 wherein at said last section said sheath is remove completely and an outer portion of said inner fiber portion is roughened where said sheath is completely removed leading to said laser light exit.

28. A method for reducing pump light in a region of a laser light exit of a laser resonator fiber formed of a fiber core surrounded by a pump fiber comprising an inner fiber portion which in turn is surrounded by a sheath, comprising the steps of:

providing a last section of said pump fiber preceding and leading up to said laser light exit so that at least a reduced portion of the sheath is provided followed by a region having no sheath to reduce pump light emitted with the laser light at said laser light exit.

#### REMARKS

The Examiner rejected claims 9-20 under 35 U.S.C. §112, second paragraph as incomplete.

As shown in Applicant's drawing figure, a fiber core 2 serving as a laser resonator is provided. This fiber core laser resonator has a laser light exit at 11. The fiber core resonator is surrounded by a pump fiber 10. The pump fiber 10 comprises an inner fiber portion 1 and surrounding sheath.

Pump light 5 enters the pump fiber and laser light is generated within the resonator fiber core 2. Prior to the exit for laser light at 11, the sheath is at least partially removed. Remaining pump light not absorbed in the resonator prior to the end face thus is dissipated so that at the light exit face 11, pump light is reduced so that interference with the laser light is reduced.

The newly presented method and apparatus claims are directed to a resonator surrounded by the pump fiber. Thus the problem noted by the Examiner under Section 112, second paragraph is eliminated, since a laser per se is not being claimed. Rather, in the method claims, a method for reducing pump light of the exit of a laser resonator surrounded by a laser pump fiber is claimed. Similarly in the apparatus claims, the system recited for a fiber laser comprises the fiber core